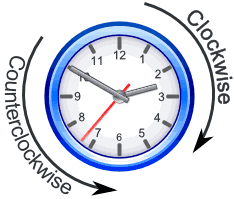
**Rotations on the Coordinate Plane**  Name:

Rodriguez/Geometry

Remember that rotations are like moving around a circle a certain number of degrees.

Movement is clockwise or counterclockwise:

[](http://www.mathsisfun.com/geometry/clockwise-counterclockwise.html)

So, with that said, it’s time to look at rules for rotations.

**Part 1:**

**90 degrees counterclockwise, center at (0, 0) (center = where the rotation “starts”)**

Look at how the points change, and then come up with a rule:

***PRE-IMAGE IMAGE***

RULE:

(9, 8) (-8, 9)

(-7, 10) (-10, -7)

(4, 11) (-11, 4)

(0, 6) (-6, 0)

Why do you think this happens?

Would this same thing happen for 90 degrees clockwise? Why?

**Part 2:**

**180 degrees counterclockwise, center at (0, 0)**

Look at how the points change, and then come up with a rule:

***PRE-IMAGE IMAGE***

RULE:

(9, 8) (-9, -8)

(-7, 10) (7, -10)

(-4, -11) (4, 11)

(0, 6) (0. -6)

Why do you think this happens?

Would this same thing happen for 180 degrees clockwise? Why?

**Part 3:**

**270 degrees counterclockwise, center at (0, 0)**

Look at how the points change, and then come up with a rule:

***PRE-IMAGE IMAGE***

RULE:

(9, 8) (8, -9)

(-7, 10) (10, 7)

(-4, -11) (-11, 4)

(0, 6) (6. 0)

Why do you think this happens?

Would this same thing happen for 270 degrees clockwise? Why?